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10/657,136	09/09/2003	Young-Wun Song	0630-1833P	1908
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EXAMINER THERIAULT, STEVEN B				
ART UNIT		PAPER NUMBER		
2179				
NOTIFICATION DATE		DELIVERY MODE		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

### Office Action Summary

**Application No.**

10/657,136

**Applicant(s)**

SONG, YOUNG-WUN

**Examiner**

STEVEN B. THERIAULT

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**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6-10, 12 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10, 12, 14-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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#### **DETAILED ACTION**

1. This action is responsive to the following communications: RCE filed 03/24/2008.
2. Claims 1-4, 6-10, 12, 14-21 are pending in the case. Claims 1 and 7 are the independent claims. Claims 5, 11, and 13 are the cancelled claims. Claims 18-21 are new claims.

#### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/24/2008 has been entered.

#### ***Claim Rejections - 35 USC § 103***

3. **The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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4. **Claims 1-4, 6-10, 12, 14-15, 18-21 are rejected under 35 U.S.C. 103(a) as being anticipated by Humpleman et al. (Hereinafter Humpleman) U.S. Patent No. 6198479 issued Mar. 6, 2001, in view of Wang et al (hereinafter Wang) U.S. Patent No. 7200683 filed August 4, 2000.**

In regard to **Independent claim 1**, Humpleman teaches a method for displaying positions of home network appliances, comprising:

- Receiving an appliance characteristics data stream from the home network appliances connected to a home network (See Genip process and column 11, lines 20-67 and column 12, lines 1-35). Humpleman teaches a process for determining when a new device has been added to the network and receives the configuration information for the device.
- Reading an appliance type identifier for indicating a type of each home network appliance connected to the home network and an appliance inherent identifier of the home network appliance, from the received appliance characteristics data stream (See column 13, lines 25-37). Humpleman teaches the system reads the properties file based on the device identifier to retrieve information to display the device in the network. Humpleman teaches that when the user selects the device button (See figure 10) the inherent identifiers for a service (e.g. dads TV) for such things as a TV, VCR, or CD player. From there, the system displays the controls for a VCR and CD player.
- Generating an appliance identifier by linking the read appliance type identifier with the read appliance inherent identifier (See column 13, lines 1-67 and column 15, lines 20-30). Humpleman teaches the system uses the device file list that contains identifiers to build the tree of the network. The session manager uses the tree to link services to the devices.

- Setting a position pointer for indicating a position of each home network appliance (See figure 7, column 14, lines 1-12). Humpleman teaches the user can group the devices into a room by setting a position pointer for each appliance. The Examiner relied on the definition in the present application specification of a position pointer (See PG Pub Para 39) where the position pointer indicates the location of the device in the home. In figure 7 and in the accompanying text, the user adds additional text lines to a group and/or device to describe its location.
- Reading a text object corresponding to the position pointer from a text library, wherein the text library comprises the text object for indicating positions of the home network appliances;  
combining a graphic object corresponding to the appliance identifier with the text object corresponding to the position pointer (See column 13, lines 25-67 and column 15, lines 8-12 and 49-67). Humpleman teaches reading the device list file that contains the room information established by the user and having text associated with the Icon for the given device (See column 14, lines 5-12) and also the (user.html file) can be considered a text object associated with the device. A list file can be considered a library of text objects as this list file contains the list of all the devices organized by name. The name information contains location information embedded in it. For Example, Humpleman teaches the user selects "Dads TV" and the logo, name, and file associated with the icon as accessed. Further, (See Fig. 10), the control panel for the device contains the Name that indicates the location, which is stored in the device list file. The display also shows preferences, which is where the location for the device is established and stored in the top level home page as described in column 13. Humpleman shows an example where the device link page (Fig. 5a) is selected and the page shows a graphical object combining the appliance identifier with the text object that **corresponds** to the position pointer (See Fig. 7).
- Displaying the combined graphic and text object on a screen (See figure 6-7).

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Humbleman does not expressly teach

Wherein the text object is displayed on a certain portion of the graphic object corresponding to the appliance identifier, and a text size of the appliance identifier is adjustable.

However, Wang teaches a system for providing user interfaces for devices connected to a network (See Figure 5). Wang teaches a process of displaying the text of an object, that includes the name, and the object is a graphic object indicative of the appliance it represents. The text can be adjusted via a style sheet command to allow user defined fonts and sizes (See column 11, lines 14-30). Wang teaches the graphic icons can be used to represent status, **user configured settings**, or manufactures formats (See column 12, lines 24-37). Wang teaches the user configurable setting can be one of device location (See table 2, column 13, lines 40-45). Wang also teaches the text (name) of an object is displayed below the icon, and represents a certain portion of the graphical object (See column 13, lines 1-21). Moreover, Wang teaches that the Name, icon and logo maximum sizes can be arranged to facilitate design of the GUI, which suggests that the graphical layout of the text as well as the icon and logo are used and displayed on the screen. Wang and Humbleman both teach displaying devices discovered on a home network.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Humbleman and Wang in front of them, to modify the system of Humbleman to include an ability to adjust the font size of a text object associated with a graphic object and then displaying the text in a certain portion of the graphical object for the purposes of indicating a position of the appliance represented by the graphic object in a users home. The suggestion to combine comes from A) Wang shows displaying a name input by a user indicating a position (See column 12, lines 50-67). b) Wang teaches the process of adjusting the font size of the text for a given device that is to be displayed in a webpage for the purposes of adjusting the layout of the screen to fit all of the devices connected on the network. c). Wang teaches the user configurable settings include a device location and the settings are stored in a device configuration summary homepage and the attributes of a device have a device location and a

name that are configurable (See column 13, lines 40-45). The motivation to combine comes from Wang as it discloses a similar mechanism for device determination and discovery and presentation of information in a browser. Humpleman is also a co-inventor of the Wang patent. Moreover, the direct suggestion comes from the Wang where dynamic control of multiple devices located on several networks can be controlled by a single interface written in HTML that accesses a directory of files and attributes in a similar manner to present the user with controls to operate machines organized in rooms of a house.

With respect to **dependent claim 2**, Humpleman teaches the method wherein the appliance identifier indicates a model name and a serial number of the home network appliance (See column 10, lines 1-10).

With respect to **dependent claim 3**, Humpleman teaches the method wherein the appliance inherent identifier indicates a serial number of the home network appliance (See column 10, lines 1-10 and column 11, lines 25-40). A dedicated IP address along with a model number can be considered a serial number. Given the device list and the arbitration protocol that distinguishes each device from one another, identification of devices can be made even if similar devices are connected to the network (See column 11, lines 9-35).

With respect to **dependent claim 4**, Humpleman teaches the method wherein the position pointer indicates positions of the different types and the same type of home network appliances (See figure 7 and column 14, lines 1-12). The user can configure the network as they see fit were items can be in one room or they can be placed in similar bin for the same device types.

With respect to **dependent claim 6**, Humpleman teaches the method wherein the displaying step displays the combined graphic and text object on the screen in order to make a user easily recognize a home network appliance to control (See Figure 7 and column 14, lines 1-10). Humpleman teaches the user can assign text to an item and the device already has an icon that

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is considered a graphical object.

In regard to **claims 7-10 and 12**, claims 7-10 and 12 reflect the apparatus comprising computer readable instructions for performing the steps of method claims 1-4, and 6, respectively, and are rejected along the same rationale.

With respect to **dependent claim 14**, Humpleman teaches the apparatus wherein the appliance identifier-generating unit includes:

- A network interface module for receiving the appliance characteristics data streams stream from the home network appliances (See DHCP server, Column 11, lines 7-31).
- A stream processing module for reading an appliance type identifier and ~~a product~~ the appliance inherent identifier from the received appliance characteristics data stream and generating an the appliance identifier by linking the read appliance type identifier with the ~~product~~ appliance inherent identifier (See column 13, lines 25-37). Humpleman teaches the system reads the properties file based on the device identifier to retrieve information to display the device in the network. Humpleman teaches that when the user selects the device button (See figure 10) the inherent identifiers for a service (e.g. dads TV) for such things as a TV, VCR, or CD player. From there, the system displays the controls for a VCR and CD player.
- A text library for storing the appliance identifier generated in the stream-processing module (See Device List File, column 11, lines 45-67 and GENIP database, column 12, lines 10-35).

Humpleman does not expressly teach:

A text processing module for adjusting the text size of the appliance identifier stored in the text library according to the preset font file

Humpleman teaches a process using a standardized presentation process, by using HTML files that keeps the Icons and logos the same size in the display for easier presentation, which can include text processing when the model number of the device is included with the logo (See



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column 6, lines 55-67 and column 9, lines 55-60 and column 10, lines 25-35 and column 14, lines 1-15). However, as indicated above, the combined limitation of claim 14, which is similar to claim 1, reflects the text object displayed on a certain portion of the graphic object corresponding to its position in the home. Humpleman does not expressly recite adjusting according to a pre-set font. However, this limitation would have been obvious to one of ordinary skill in the art at the time of the invention in view of Wang, because Wang suggests that fonts can be adjusted (See column 13, lines 1-21). The motivation to combine comes from Wang as it discloses a similar mechanism for device determination and discovery and presentation of information in a browser. Humpleman is also a co-inventor of the Wang patent. Moreover, the direct suggestion comes from the Wang where dynamic control of multiple devices located on several networks can be controlled by a single interface written in HTML that accesses a directory of files and attributes in a similar manner to present the user with controls to operate machines organized in rooms of a house.

With respect to **dependent claim 15**, Humpleman teaches the apparatus wherein the stream-processing module includes:

- A preprocessor for parsing the appliance characteristics data stream received from the network interface module (See column 12, lines 9-37). The GENIP process can be considered a pre-processor as it maintains a pre-defined list of devices and polls the device set prior to the DHCP server having the device in the device list. Once the GENIP process id's the device then the DHCP server extracts the information for the system.
- A buffer for storing the appliance characteristics data stream parsed in the preprocessor (See column 12, lines 35-40). The system would use memory to write a new database list and replace the old once the new device was detected in the GENIP process.

- A buffer manager for storing the appliance characteristics data stream parsed in the preprocessor in the buffer and outputting a register signal corresponded to the temporarily stored appliance characteristics data stream (See column 12, lines 1-67). The GENIP process outputs a signal to the devices where the common directory of the device list database is stored (See column 12, lines 40-52).
- A generator for reading the appliance type identifier and the product inherent identifier from the appliance characteristics data stream stored in the buffer according to the register signal outputted from the buffer manager and generating the appliance identifier by linking the read appliance type identifier to the product inherent identifier (See column 13, lines 25-37). Humpleman teaches the system reads the properties file based on the device identifier to retrieve information to display the device in the network. Humpleman teaches that when the user selects the device button (See figure 10) the inherent identifiers for a service (e.g. dads TV) for such things as a TV, VCR, or CD player are identified to the user and the system. From there, the system displays the controls for a VCR and CD player. Another interpretation provides that the IP address is determined for a given device (See column 11, liens 1-30) and with the device comes a set a predefined properties of the device that can include a host of inherent identifiers.

In regard to claims **18 and 20**, claims 18 and 20 appear to contain substantially similar subject matter as claim 1 where an appliance on a home network has a type identifier and a position identifier along with a text object with adjustable text. As indicated above, Humpleman in view of Wang, teach a structure for displaying a graphic object (See Humpleman figure 7, Sony). Humpleman shows text associated with the Sony graphic where the text is "living room". Humpleman does not suggest allowing the font of the text to be adjustable. However, Wang teaches that style sheets can be used to present device information, where the user can ultimately adjust the size of the font to their

desire. The teachings of Wang and Humpleman are combinable for the reasons mentioned in claim 1.

In regard to **Claims 19 and 21**, claims 19 and 21 reflect the apparatus comprising computer readable instructions for performing the method claims 18 and 20, respectively, and are rejected along the same rationale.

6. **Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman et al. (Hereinafter Humpleman) U.S. Patent No. 6198479 issued Mar. 6, 2001, in view of Wang et al (hereinafter Wang) U.S. Patent No. 7200683 filed August 4, 2000. in further view of Humpleman (Hereinafter Humpleman') U.S. Patent No. 6546419 issued Apr. 8, 2003.**

In regard to **dependent claims 16 and 17**, as indicated in the above discussion, Humpleman in view of Wang teaches every limitation of claim 15.

Humpleman teaches the wherein the position matching unit includes a position matching module for matching the appliance identifier indicated by the indicating module to a pertinent position pointer according to a user operational key signal (Humpleman Figure 7-8, 10 and column 15, lines 5-55). Humpleman shows the user can group the devices as they see fit on the display, which is a position indicator. The device link page 710 would show the grouping in the interface as shown in figure 7. The user selects the device with the pointer and figure 10 is displayed. Humpleman teaches a text library for storing a text object corresponded to the position pointer recorded in the position list and a graphic library for storing a graphic object corresponded to the appliance identifier and a storing module for storing the text object and the graphic object read by the library managing module (See GENIP process column 12, lines 1-35 and DHCP discovery process column 11, lines 20-67 and column 7, lines 34-67). Humpleman shows the discovery process can read a device profile, extract the HTML files containing properties of the device, a logo and Icon (graphic) along with text describing the device and stores the information in the device list database. The GENIP process is a and discovery process is a managing module for reading the appliance identifier matched to the

pertinent position pointer by searching the position list according to a display request signal generated by the use because the user can organize the devices into groups and the group information is stored in the device list. The device list and database area a library managing module for reading the graphic object for indicating the appliance identifier read in the list in the managing module from the graphic library and the text object matched to the appliance identifier from the text library because a given devices GUI is matched to the database of items and then the GUI is displayed in the system of Humpleman. Humpleman teaches that text items can be saved along with the graphical object (See column 14, lines 1-15) where the text entered by the user will be displayed in the interface along with the logo where the user has grouped them, which is a given position. The display of Humpleman contains a display that displays the graphical position of the item on the screen (See figure 7). Wang also teaches defining a device location in a configuration setting page and where the device location is implied in the name (See column 13, lines 1-21 and Table 2).

Humpleman in view of Wang does not expressly teach a position matching table set so as to record the appliance identifier according to a position pointer and an indicating module for indicating the appliance identifier adjusted in the text processing module and the position pointer set in the position matching table and a matching table managing module for distinguishing the home network appliances by recording the appliance identifier on the position matching table by the position pointer according to the information matched in the position matching module. However, these limitations would have been obvious to one of ordinary skill in the art at the time of the invention, in view of Humpleman', because Humpleman' teaches the use of an attributes table that contains both the device ID and the device location. Further, Humpleman' teaches the device manager can use the table to match the device capabilities to provide a service (See column 9, lines 35-67 and column 10, lines 1-20). Humpleman' teaches the use of the table is for the purpose of storing location information along with other attributes. The motivation to combine Humpleman and Wang

with Humpleman' comes from the suggestion in Humpleman' that multiple devices can be on a home network and a need exists to allow the user to match a given service to a given device and deliver the service to the user device of choice that is located in the place the user most desires (See column 2, lines 20-37). The two Humpleman references and the Wang reference teach the process of identifying the devices on a home network. The Humpleman's both teach the GENIP or IP addressing and contain similar teachings in their disclosures and the Humpleman' references are an extension over the previous reference. Therefore, the structure of both references provides for a reason and rationale to combine the references.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-4, 6-10, 12, 14-21 have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments revolve around the amended claims in light of the prior art and as presented above the Examiner relied on new art to teach the combination of the claims.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. Theriault whose telephone number is (571) 272-5867. The examiner can normally be reached on M, W, F 10:00AM - 8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven B Theriault/  
Patent Examiner  
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